

WHAT IS CLAIMED IS:

1. An automobile seat belt structure and an assist apparatus thereof, wherein a seat belt portion is attached in a state of keeping a tension without being in contact with a body of an occupant, and prevention means for preventing a so-called submarine phenomenon that the occupant slides out from a lower area of the belt when an accident is generate is provided in the belt portion.

2. An automobile seat belt structure and an assist apparatus thereof, wherein a seat belt portion is attached in a state of keeping a tension without being in contact with a body of an occupant, and there is employed means characterized in that a submarine corresponding cushion (1) bonded to a horizontal supporting column (Y) portion connected to a seat body (Z) side surface is drawn forward in accordance with a force by which the belt portion (B) is drawn forward the vehicle due to an inertia when the accident is generated, said cushion is bent to a front face of the body of the occupant around a hinge (2) corresponding to a center line and said submarine corresponding cushion (1) covers between the armpit and the chest, as prevention means for preventing the occupant from sliding out from a lower area of the belt when an accident is generate. ..

3. An automobile seat belt structure and an assist apparatus thereof, wherein a seat belt portion is attached in a state of keeping a tension without being in contact with a body of an occupant, a cushion (1) simply fixed via a horizontal support column (Y) and a magnet disposed in a side portion of a seat body (Z) is provided in one end of the belt (B), as prevention means for preventing the occupant from sliding out from a lower area of the belt when an accident is generated, and there is employed means characterized in that an attraction state of the magnet in said cushion (1) is cancelled together with a force by which the belt portion (B) is drawn forward the vehicle due to an inertia when the accident is generated, a bonding angle between the horizontal support column (Y) disposed in the side portion of the seat body (Z) and said cushion (1) is changed, and said cushion (1) is driven from the side of the armpit to the below of the armpit and the above of the waist.

4. An automobile seat belt structure and an assist apparatus thereof, wherein a seat belt portion is attached in a state of keeping a tension without being in contact with a body of an occupant, and there is employed means characterized in that a flexible elastic material (3) is mounted to a belt portion (B) and said flexible elastic

material (3) expands so as to form a spherical shape or the like together with a force by which the belt portion (B) is drawn forward the vehicle due to an inertia when the accident is generated, as prevention means for preventing the occupant from sliding out from a lower area of the belt when an accident is generate.

5. An automobile seat belt structure and an assist apparatus thereof, wherein a seat belt portion is attached in a state of keeping a tension without being in contact with a body of an occupant, and there is employed means characterized in that an auxiliary air bag is mounted to a belt portion or a belt latch portion and said auxiliary air bag is expanded together with a force by which the belt portion is drawn forward the vehicle due to an inertia when the accident is generated or an expansion of the air bag previously provided within an automobile, as prevention means for preventing the occupant from sliding out from a lower area of the belt when an accident is generate.

6. An automobile seat belt structure and an assist apparatus thereof as claimed in any one of claims 1 to 5, wherein fixing positions of right and left supporting columns of a seat body in the seat belt portion can be freely adjusted and said fixing position can be adjusted in correspondence

to a body condition of the occupant.

7. An automobile seat belt structure and an assist apparatus thereof as claimed in any one of claims 1 to 6, wherein in order to easily disengage the seat belt when the accident is generated, a belt latch portion and a latch-receiving portion attached by an electric magnet is structured such that an engine rotation is stopped due to an accident, whereby a power generating function is stopped, an energizing to the electric magnet is stopped in interlocking with the stop of the power generating function and said magnetic function is automatically lost.

8. An automobile seat belt structure and an assist apparatus thereof as claimed in any one of claims 1 to 7, wherein there is employed means characterized in that an expanded flexible material such as an air bag or the like is mounted to the seat belt portion in a so-called assistant driver's seat so as to reduce a gap between the occupant and a dash board portion at a normal time and utilize as a body stabilizing and holding device and said flexible material moves and deforms in interlocking with a motion of the belt portion so as to stabilize a head portion and a body in the case that the body moves due to an inertia or a centrifugal force when the accident is generated.

9. An automobile seat belt structure and an assist apparatus thereof, wherein a seat belt portion is attached with keeping a tension without being in contact with a body of an occupant, whereby it is possible to remove the pressure feeling applied by the shoulder belt, for an occupant having a disease in the chest, an occupant having diseases of adult people such as a hypertension, a cardiac disease, an apoplexy and the like popular for people equal to or more than forty years old or an occupant having a chest pain, a headache, a retch and the like, and wherein prevention means for preventing a so-called submarine phenomenon that an occupant slides out from a lower area of the belt when the accident is generated is provided in the belt portion.